

S/141/61/004/001/022/022  
E192/E382

AUTHOR: None given

TITLE: Fourth All-Union Conference on Radio-electronics  
of the Ministry of Specialised Higher and Secondary  
Education of the USSR

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,  
Radiofizika, 1961, Vol. 4, No. 1, pp. 187 - 196

TEXT: The conference took place during October 24 - 29,  
1960 in Khar'kov and was attended by 1 000 delegates from 35  
towns in the Soviet Union.

Over 230 papers were read at the conference. The conference  
was opened by the Deputy Minister of the MVSSO UkrSSR  
(Ministry of Specialised Higher and Secondary Education of the  
Ukrainian SSR) Comrade I.S. Dzyubko and by the lectures of  
Corresponding Member of the AS Ukrainian SSR C.Ya. Braude,  
entitled "Radio Oceanographic Investigations of the Sea-wave  
Phenomena" and Corresponding Member of the AS Ukrainian SSR  
N.D. Morgulis dealing with "Some Problems of the Physics of  
Thermionic Energy Conversion".

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During the concluding plenary session the following survey papers were read:

"Some Problems of Electrodynamics and Thermodynamics of the General Relativity Theory During Accelerated Motion of Macroscopic Bodies with Relativistic Velocities" by V.L. German and "Methods of Experimental Investigation of Electron Beams" by N.S. Zinchenko.

The achievement of the conference was summarised by Corresponding Member of the AS Ukrainian SSR A. Ya. Usikov.

The conference recommended that the Fifth All-Union Conference on Radio-electronics should take place in Minsk in the Spring of 1962.

The conference was divided into the following sections: electrodynamics at UHF; UHF electronics; general electronics; quantum radiophysics; radio-wave propagation and radio-astronomy; general radio-engineering; semiconductors and their application in radio-engineering and radio measurements.

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1. Papers read at the sections of UHF electronics, general electronics and UHF electrodynamics.

In general, it can be said that the papers in these sections were mainly concerned with the investigation of various processes dealing with the interaction of plasma and electromagnetic fields.

The work of O.G. Zagorodnov et al described the experimental investigation of the nonlinear distortion of sinusoidal electromagnetic waves propagating in a cylindrical plasma waveguide.

The lecture by V.Ye. Golant and A.P. Zhilinskiy dealt with the nonlinear effects which accompany wave propagation in waveguides containing plasma.

The work of V.D. Shapiro investigated theoretically the stability of longitudinal nonlinear oscillations of plasma electrons with respect to the perturbations whose wavelength is small in comparison with the wavelength of the stationary potential.

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The works of O.G. Zagorodnov et al were devoted to the investigation of the propagation of electromagnetic waves in moving plasma. A detailed analysis of the propagation of electromagnetic waves in plasma waveguides was given in the experimental works of O.G. Zagorodnov et al (three papers). The work of V.P. Shestopalov and I.P. Yakimenko investigated in detail the scattering characteristics of a helix-plasma system.

The paper of N.A. Kuz'min was concerned with the variation method of analysis of the waveguides which are partially filled with a gyrotropic medium.

The problem of wave propagation in a waveguide partially filled with a weakly relativistic plasma in the presence of a constant magnetic field applied along the axis of the system was considered in the work of A.V. Gaponov and M.I. Petelin. The paper of Ya.M. Turover was concerned with the evaluation of the possibility of description of a plasma delay line by telegraph equations.

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The work of V.D. Ivanova and V.S. Mikhalevskiy gave an experimental investigation of the frequency-control of a travelling-wave tube oscillator.

The paper by Yu.F. Filippov was devoted to the investigation of magnetohydrodynamic oscillations of the medium in resonators and waveguides.

Electromagnetic waves propagating in plasma transversely to an external magnetic field were considered in the work of Yu.N. Dnestrovskaya and D.P. Kostomarov.

Several papers were concerned with the investigation of the interaction of plasma with electron and ion beams; in particular, M.S. Kovner investigated the stability of a beam of charged particles and plasma by using the kinetic equation. The paper of V.O. Rapoport was concerned with the phenomenological method of solving the problem of amplification of electromagnetic waves in a plasma beam moving in plasma in the presence of a magnetic field. ✓

The work of V.D. Shapiro considered the deceleration of an electron beam as a result of its interaction with bulk plasma oscillations.

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M.A. Gintsburg gave a detailed analysis of the interaction of plasma with ion beams on the basis of the kinetic equation. The problems of high-frequency discharges in rarefied gases were discussed in two papers: the work of S.B. Mochenev gave a theoretical analysis of the influence of irregularities of the magnetic field on the discharge characteristics, while the work of G.N. Zastenker et al gave results of an experimental investigation of the formation of the discharge at frequencies between 3 and 20 Mc/s and pressures from 0.3 to 30 mm Hg. I.A. Savchenko and A.A. Zaytsev presented the results of an experimental investigation of the electron oscillations in plasma.

2. Section of UHF electronics.

The papers read at this section dealt with the interaction of plasma with electromagnetic fields; apart from that, a number of papers dealt with the theoretical and experimental investigation of electron devices for UHF.

The opening lecture at the section by V.S. Ganzburg and V.G. Karmazin surveyed the present state of technology of a high-power klystron amplifier.

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3. Section of UHF electrodynamics.

Some of the papers read at this section dealt with the propagation of electromagnetic waves in plasma, while a number of papers were concerned with the problems of the electrodynamics of delay systems, waveguides and resonators.

4. Section of general electronics .

During the sessions of this section, 15 papers were read and discussed. Some of the papers were devoted to the investigation of various aspects of electron optics.

5. Section on quantum radiophysics.

Some of the papers in this section dealt with the problem of nuclear magnetic resonance; several papers were concerned with the processes taking place in ferrite media; other papers were devoted to the theory of masers and parametric amplifiers.

6. Section on radio-wave propagation and radio-astronomy.

The 37 papers read at this section were devoted to some of the problems of radio-astronomy, experimental and theoretical investigation of radio-wave propagation in nonuniform media,

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methods of investigation of the structure of the ionosphere and to special antenna systems.

7. Section on general radio-engineering.

The 12 papers read at this section covered a fair variety of subjects.

8. Semiconductor section.

Some of the papers read in this section were concerned with the preparation and application of semiconductor devices for radio-engineering; there were also papers dealing with the investigation of internal processes in semiconductors.

9. Radio-measurements section.

The papers in this section were concerned with the development and investigation of quartz crystal oscillators, measurement of the parameters of travelling-wave and backward-wave tubes, measurement of dielectric characteristics of various substances and new methods of measurement,

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D274/D303

3.5/33  
9.9822

AUTHORS: Usikov, O.Ya., ~~F~~erman, V.L., and Vakser, I.Kh.

TITLE: Study of absorption and scattering of millimeter waves by precipitations. I, II

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 6, no. 5, 1961, 618 - 640

TEXT: Experimental results are given on the attenuation of millimeter (8.15 to 2.7) radiowaves by rain, as well as basic theoretical results concerning absorption and scattering of such waves by precipitations. In the theoretical investigation, one has to proceed from a rigorous solution of the pertinent electrodynamical equations, taking into account the dispersion of the complex dielectric constant of water in the millimeter range. If the values for the absorption and the effective scattering cross-section for the individual particles are known, as well as the distribution function (of drop-size), then the total absorption and scattering can be found for precipitations with particles of similar or dis-

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similar size. The change in wave-intensity as a function of distance, due to absorption and scattering by precipitations, is expressed by

$$I = I_0 e^{-x \sum_i N_i Q^n(D_i, \lambda)}$$

where  $N_i$  - the number of particles with diameter  $D_i$  per unit volume,  $Q$  - the effective cross-section of attenuation. The attenuation due to rain, expressed in decibels per kilometer, is

$$\gamma = 0,434 \sum_i N_i \left( \frac{1}{\text{cm}^3} \right) Q^n[D_i(\text{cm}), \lambda(\text{cm})]. \quad (1)$$

The experimental investigation proceeded from Eq. (1). As inaccurate determination of  $N_i$  may be a chief source of errors, special attention was given to the structure and distribution of rain drops. The method adopted, ensured greater accuracy of measurements over a short track. The field studies were carried out (in 1951-1952) in the neighborhood of Batumi, a region with very frequent

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precipitations (and of varying intensity). Experimental data on the drop-size distribution were obtained by the well-known method of fixation by means of filter paper. A comparison of samples showed that the size-distribution differs greatly and therefore, the attenuation cannot be uniquely determined from the intensity of the waves. At the same time, data were collected on the distribution of particles according to  $N_1$  needed for a comparison of theoretical and experimental values. A figure shows the experimental setup used for attenuation measurements. A klystron was used as a generator. High-frequency elements - waveguides, wave-detectors, etc., were developed to meet the requirement of detecting slight signal-variations. The setup could be used in two ways for detecting wave-attenuation: Either by measuring the signal after it traversed the track once, or after a double passage. The second method involves the reflection of the signal and is more reliable, in particular with light rain. An absorption track of 50-100 m was used; hence, the sensitivity of the setup had to be very high (so as to measure variations of the order of a hundredth part of a decibel). Such a degree of sensitivity was obtained by compen-

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sation of the measured signals. A figure shows a diagram of a bridge circuit with two detectors which work by the method of the reflected signal. The rain intensity was measured by means of rain-drop meters. The principal measuring device was a waveguide attenuator, used for checking the sensitivity and for graduating the indicator scale of the bridge circuit. About 2000 measurements of attenuation were taken. The above setup was used for a wavelength  $\lambda = 8.15$  mm. For the other wavelengths, the setup was slightly modified. Thus, in the case of  $\lambda = 6.8$  mm, a magnetron was used as a generator. Figures show plots of absorption versus rain-intensity for the various wavelengths. The theoretical investigation of attenuation, due to atmospherical inhomogeneities, is considerably simplified if the size of the particles is considerably smaller than the wavelength, i.e.  $D/\lambda \ll 1$ . This inequality holds (in the millimeter range) for storms, clouds, industrial smole, etc. Hence the problem can be solved in the Rayleigh approximation, i.e. the solution of the wave equation is obtained by solving the Laplace equation. The generalized Rayleigh formula for attenuation is

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$$\gamma_I = 0,434 \frac{\pi I^2}{4} \sigma_1, \quad (3)$$

where

$$\sigma_1 = 2\pi c_1 \left( 1 + \frac{c_2}{c_1} \rho^2 + \frac{c_3}{c_1} \rho^3 + \dots \right);$$

for radar reflections:

$$\gamma_{II} = 0,434 \frac{\pi D^2}{4} \sigma_2, \quad (4)$$

where

$$\sigma_2 = A_1 \rho^1 \left( 1 + \frac{A_2}{A_1} \rho^2 + \frac{A_3}{A_1} \rho^3 + \dots \right).$$

The coefficients of these equations are listed in tables. The difficulties in obtaining exact solutions for these equations can be overcome by means of recursion formulas, (for the coefficients  $a_n$  and  $b_n$  which enter the expressions for the absorption cross-section  $Q^I$  and scattering cross-section  $Q^{II}$ ). Tables list the values

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for  $Q^I$  and  $Q^{II}$ . In the general case

$$\gamma' = \sum_i N_i \left( \frac{1}{c \mu^3} \right) Q_i^I(c \mu^3) 10^6 \frac{\partial \delta}{\kappa \mu} \quad (5)$$

and

$$\gamma'' = \sum_i N_i \left( \frac{1}{c \mu^3} \right) Q_i^{II}(c \mu^3) \cdot 10^6 \frac{\partial \delta}{\kappa \mu} \quad (6)$$

From the tabulated values for  $Q^I$ ,  $Q^{II}$ , and the experimentally obtained values of  $N_i$ , it is possible to determine the attenuation and the scattering by means of formulas (5) and (6). For  $N_i$ , one obtains

$$N_i = \frac{q_i}{v_i \sigma_i} = \frac{q_i I \left( \frac{\mu \mu}{200} \right)}{6 \pi v_i \sum_i q_i D_i^2(\mu \mu)} \quad (7)$$

By virtue of Eq. (5) and (8), one obtains

$$\gamma' = \sum_i 10^6 N_i \left( \frac{1}{c \mu^3} \right) Q_i^I(c \mu^3) = \frac{I \left( \frac{\mu \mu}{200} \right) \sum_i \frac{q_i Q_i^I}{v_i}}{6 \pi \sum_i q_i D_i^2(\mu \mu)} \cdot 10^6 \quad (9)$$

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If the rain drops are of the same size, then

$$\gamma_D = \frac{I\left(\frac{\mu\mu}{\cos\theta}\right) Q^2(D, \lambda)}{6\pi v(D) D^3 (\mu\mu)} \quad (10)$$

Hence, the attenuation and the radar reflection of millimeter waves do not depend on rain intensity only, but also on the drop-size distribution. Four numerical examples are given which show that the values calculated by formulas (5) and (9) give a true picture of absorption and scattering of millimeter waves by precipitations over the entire millimeter-range. There are 5 figures, 29 tables and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: Van Vleck, Phys. Rev. 71, 413, 1947; 71, 425, 1947; Langmuir, Journ. of Meteor., 5, 175, 1948.

ASSOCIATION: Instytut radiofizyky ta elektroniky AN URSR M. Kharkiv (Institute of Radiophysics and Electronics, AS UkrSSR, Kharkiv)

SUBMITTED: January 7, 1961  
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L 13341-66

EWI(d)/EWI(l)/EWP(m)/FCS(k)/EWA(l) IJP(c) WW

ACC NR: AP6002314

SOURCE CODE: UR/0373/65/000/006/0003/0009

AUTHORS: Boyev, A. G. (Khar'kov); German, V. L. (Khar'kov)(deceased)

ORG: none

TITLE: Curvilinear coordinates in boundary layer theory

SOURCE: AN SSSR. Izvestiya. Mekhanika, no. 6, 1965, 3-9

TOPIC TAGS: boundary layer, compressible flow, curvilinear coordinates, space curvature, similarity theory, fluid flow, tensor

ABSTRACT: A curvilinear system of coordinates is introduced to generalize the boundary layer equations of a viscous fluid flow. The equations are first given in four-dimensional space notation

$$\rho v^{\alpha} \frac{\partial v_i}{\partial x^{\beta}} = - \frac{\partial p}{\partial x^i} + \frac{\partial}{\partial x^k} (\rho \mu_{ik}) - \frac{\sigma}{c} H_0^2 v_i$$

$$\rho T v^{\alpha} \frac{\partial S}{\partial x^{\beta}} = \text{div} \left( \frac{\mu c_p}{p} \nabla T \right) + \mu (v_{ik})^2 + \frac{\sigma}{c} H_0^2 (v_k)^2$$

$$\frac{\partial}{\partial x^{\beta}} (\rho v^{\beta}) = 0, \quad p = \rho R T \quad (\beta = 1, 2, 3, 4; \quad i, k = 1, 2, 3)$$

and subsequently written in generalized curvilinear coordinates using the contravariant base vector

$$a_1 = \frac{\partial \mathbf{r}}{\partial \xi} = e_1 + \frac{\partial y}{\partial \xi} e_2, \quad a_2 = \frac{\partial \mathbf{r}}{\partial \eta} = w e_2$$

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$$a_1 = \frac{\partial x}{\partial \xi} = e_1 + \frac{\partial y}{\partial \xi} e_2, \quad a_2 = e_2 + \frac{\partial y}{\partial \eta} e_2$$

and the metric tensor  $g_{ik}$  such that

$$\sqrt{g} = \sqrt{\det g_{ik}} = w$$

The boundary layer equations then become

$$\rho \frac{\partial v^a}{\partial \tau} + \rho v^k \frac{\partial v^a}{\partial \xi^k} = - \frac{\partial p}{\partial \xi^a} + \frac{1}{\sqrt{g}} \frac{\partial}{\partial \eta} \left[ \mu \sqrt{g} g^{ab} \frac{\partial v^a}{\partial \eta} \right] - \frac{\sigma (H_1)^2 v^a}{c^2 g}$$

$$\rho T \frac{dS}{d\tau} = \frac{1}{\sqrt{g}} \frac{\partial}{\partial \eta} \left[ \frac{\mu_p}{P} \sqrt{g} g^{ab} \frac{\partial T}{\partial \eta} \right] + \mu g^{ab} \left( \left( \frac{\partial v_1}{\partial \eta} \right)^2 + \left( \frac{\partial v_2}{\partial \eta} \right)^2 \right) + \frac{\sigma (H_1)^2}{c^2 g} ((v_1)^2 + (v_2)^2)$$

$$H_1 = w H_0 = w(x, 0, z, t) H_0(x, z, t)$$

$$\frac{\partial}{\partial \tau} (\rho \sqrt{g}) + \frac{\partial}{\partial \xi^k} (\rho \sqrt{g} v^k) = 0, \quad \frac{\partial p}{\partial \eta} = 0 \quad \begin{matrix} (k=1,2,3) \\ (a=1,3) \end{matrix}$$

Next, a Dorodnitsyn transformation is made to eliminate the density from the above equations. For a two-dimensional incompressible flow the boundary layer equations are shown to be transformed to a Von Mises form if  $w$  is set equal to  $1/v_1$ . The generalized boundary layer equations are then used to obtain a self-similar solution for a compressible, unsteady, two-dimensional flow. The author, A. G. Boyev, expresses his sincere thanks to A. S. Bryukhovetskiy and A. M. Glutsyuk for evaluating the results of this work. Orig. art. has: 52 equations.

SUB CODE: 20/ SUBM DATE: 14May65/ ORIG REF: 007/ OTH REF: 002

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BOYEV, A.S. (Khar'kov); GERMAN, V.L. [deceased ]

Curvilinear coordinates in the theory of boundary layer. Inv.  
All SSSR. Mekh. no. 6:3-9 Nov '65. (MIRA 10:12)

L 21983-66 EWT(1)/ETC(f)/EPF(n)-2/ENG(m) IJP(c) AT

ACCESSION NR: AP5025993

UR/0294/65/003/005/0765/0770  
621.313.2:538.4

AUTHOR: German, V. O.; Morozov, M. G.

TITLE: Direct current plasmatron and some experimental results of its operation

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 5, 1965, 765-770

TOPIC TAGS: plasma generator, plasma physics, temperature measurement

ABSTRACT: The article shows a longitudinal section of the plasmatron (See Enclosure 01). The electrode is in the form of cylindrical tubes, whose outer surfaces are cooled with water. The diameter of the nozzle 5 is 30 mm, and the inner diameter of the rear electrode 1 is somewhat larger than the diameter of the nozzle. The body of nozzle 6 and the vortex chamber 3 are electrically insulated from the body of the rear electrode by Plexiglass packing 2. To avoid erosion of the electrodes and to maintain stable burning of the arc, the working gas is introduced tangentially into the vortex chamber; the regulating valve on the vortex chamber 7 makes it possible to change the rate of whirling inside the nozzle at constant gas feed. A copper insert 9 in the rear electrode limits the

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free displacement of the arc. The plasmatron was fed by a direct current generator with a rated voltage of 750 volts. A table shows the characteristics of the unit. Depending on the consumption of the working gas and the polarity of the electrodes, the power in the arc varied from 200 to 355 kilowatts. The efficiency changed with a change in the polarity of the electrodes; the highest value was achieved when the nozzle served as the cathode (0.7-0.75). The consumption of working gas varied from 19 to 48 grams/sec. The mean velocity of the gas at the nozzle varied from 350 to 750 meters/sec, and the mean mass temperature of the gas stream varied from 2500 to 4500 K. An investigation of the pulsations of the electric parameters and the rotation of the arc showed the presence of vibrations, divided into three groups according to frequency: of the orders of 1,  $10^3$ , and  $10^4$  cycles. "The authors express their thanks to G. A. Lyubimov for his interest in the work and for his help." Orig. art. has: 6 figures and 1 table

ASSOCIATION: Nauchno-issledovatel'skiy institut mekhaniki MGU im. Lomonosova  
(Scientific Research Institute for Mechanics, MGU)

SUBMITTED: 01Dec64

ENCL: 01

SUB CODE: 20

NR REF SOV: 007

OTHER: 004

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L 21983-66

ACCESSION NR: AP5025993

ENCLOSURE: 01

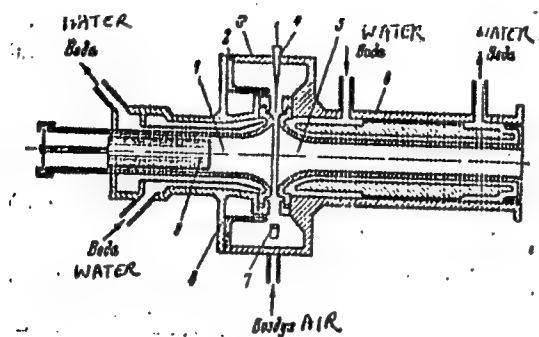


Fig. 1. Schematic of plasmatron

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GERMAN, V.S. (Tyumen')

Organizing mathematical contests. Mat. v shkole no.2:59-61 Kr-Ap  
'62. (MIRA 15:3)

(Mathematics--Competitions)

GERMAN, V.S., ruksreditel' brigady

Team for studying the experience gained in the organization and work  
of central factory laboratories. Zav. lab. 31 no.9:1154-1155 '65.

(MIRA 18:10)

MASLOV, V.A., inzh.; GERMAN, V.T., inzh.

Resistance of welded joints in low-carbon steel to corrosion by  
alkali solutions. Svar. proizvod. no.8:36-37 Ag '62. (MIRA 15:11)

1. Sumskiy mashinostroitel'nyy zavod im. M.V.Frunze.  
(Steel--Corrosion)



ACCESSION NR: AP4025737

S/0184/64/000/001/0028/0030

AUTHORS: Maslov, V. A. (Engineer); Ternyuk, M. I. (Engineer); German, V. T. (Engineer)

TITLE: Effect of deformation on the corrosion resistance of steel 18-8

SOURCE: Khimicheskoye mashinostroyeniye, no. 1, 1964, 28-30

TOPIC TAGS: steel, steel 18-8, die stamping, annealing, corrosion, acetic acid corrosion, nitric acid corrosion, corrosion resistance, corrosion rate, deformation, steel deformation

ABSTRACT: Caps were die cast with a 4% deformation from 1.5-mm thick sheets of steel 1Kh18N9T and Kh18N12M2T. One half of the caps were subjected to a repeat stamping with an additional deformation of the same magnitude. After each stamping one half of the samples were tempered by immersion in water following 5 minutes heating at 1050-1070C. The polished samples, 5 cm in diameter and 2 cm in height, were subjected to treatment with various concentrations of acetic or nitric acid. The results of corrosion tests of steel Kh18N12M2T in acetic acid showed that the corrosion rate of the original steel sheet amounted to 0.0016-0.0097 gm/m<sup>2</sup> hour for

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ACCESSION NR: APL4025737

acid concentrations of 5-98% within a temperature range of 20-80C. At boiling temperature there was a sharp rise in corrosion rate, with increased concentration of acid from 10 to 60%, while a further increase in acid concentration reduced the corrosion rate to 0.0292 gm/m<sup>2</sup> hour. The corrosion rate of samples subjected to one or two stampings was somewhat higher, amounting to 0.0018-0.0125 gm/m<sup>2</sup> hour. Here, too, the corrosion rate remained practically unchanged up to 80C. The tempered stamped samples showed a somewhat higher corrosion rate than the non-tempered. Corrosion tests of samples from steel 1Kh18N9T revealed an increased corrosion rate of the original steel sheet at higher acid concentrations and temperatures. Here, too, higher corrosion rates were observed in stamped samples, and still higher rates in stamped and tempered. Orig. art. has: 2 tables.

ASSOCIATION: none

SUBMITTED: 00

/ DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: ML

NO REF SOV: 003

OTHER: 000

Card 2/2

ACCESSION NR: AP4013295

S/0135/64/000/002/0033/0034

AUTHORS: Maslov, V. A. (Engineer); German, V. T. (Engineer)

TITLE: Corrosion resistance of stainless steel welds in some acids

SOURCE: Svarochnoye proizvodstvo, no. 2, 1964, 33-34

TOPIC TAGS: stainless steel, steel, corrosion stability, welded connection, weld corrosion stability, stainless steel weld, welding, steel acid corrosion, 1Kh18N9T steel, 1Kh18N12M3T steel, arc welding, EA-400/10 electrode, corrosion test

ABSTRACT: A short report is presented on the results obtained in corrosion testing of butt-welded stainless steels 1Kh18N9T and 1Kh18N12M3T. Sheets 6 mm thick were arc-welded by EA-400/10 electrodes 4 mm in diameter. Samples 80 x 20 x 5 mm were cut out of the welded connections and tested in acids for general and intergranular corrosion. The results were evaluated according to the loss of metal weight after the testing period. The MA test for intergranular corrosion (not described in the text) showed that these steels are satisfactorily resistant to corrosion. The general tests showed that the velocity of steel and welded connection corrosion in acids remained practically constant at 20-60C, not exceeding 0.0090 g/m<sup>2</sup>·hr. The

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samples retained their metallic luster after testing, and the boundaries of the seams were not revealed. Orig. art. has: 2 tables.

ASSOCIATION: Sumskey mashinostroitel'nyy zavod im. M. V. Frunze (Summy\* Machine Construction Plant)

SUBMITTED: 00

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: ML

NO REF SOV: 000

OTHER: 000

Card 2/2

GERG : . . . naukovo-issledovatel'skiy setrudnik

Pathological differential diagnosis of Mycoplasma infection and  
aspergillosis in turkeys, Veterinarii 42 no.7:41-44 J1 '65.

(MIRA 18:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy  
veterinarii.

Object: Hunting woodcock. Leskva, "Tizh" 1954, No. 3, p. 1052.

Source: Monthly List of Russian Acquisitions, Vol. 7, No. 3, June 1954.

Охота, рыболовство.

Okhota na bolotnuiu i lugovuiu dич' (Hunting game of swamps and meadows). Moskva, "Fizkul'tura i sport," 1953. 80 p.

SO: Monthly List of Russian Accessions, Vol 7, No 9, Dec 1954

GERMAN, Vladimir Yevgen'yevich; PETROVSKAYA, Ye.K., redaktor; SHALYGINA,  
G.A., tekhnicheskiy redaktor

[Bird hunting in spring] Vesenniaia okhota po peru. Moskva, Gos.  
izd-vo "Fizkul'tura i sport," 1956. 40 p. (MIRA 9:9)  
(Fowling)



GERMAN, V.T.

Automatic control of gas and gas condensate fields. Gaz,  
delo no.6/7:73-81 '63. (MIR) 17:10)

1. Krasnodarskiy filial Vsesoyuznogo nauchno-issledovatel'skogo  
i projektno-konstruktorakogo instituta kompleksnoy avtomatizatsii  
neftyanoy i gazovoy promyshlennosti.

PROKOP'YEVA M.I. doktor veterin. nauk, UKHOVA, L.G. kand. veterin.  
nauk, KIPRIICH, V.V., mladshiy nauchnyy sotrudnik, GERMAN, V.V.  
mladshiy nauchnyy sotrudnik

Mycoplasma infection in poultry and biological characteristics  
of its pathogen. Veterinaritsa 41 no.2.22.35 F 1964

(MIRA 17.12)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy  
veterinaritsy.

GULYAEV, Ivan Aleksandrovich; GERMAN, V.Ye., redaktor; MANINA, M.P.,  
tekhnicheskiy redaktor

[Hunting fur-bearing animals] Okhota na pushnykh sverei. Moskva,  
Gos. izd-vo "Fizkul'tura i sport," 1956. 79 p. (MIRA 9:12)  
(Hunting)

ARKHANGEL'SKIY, V.V.; MANTYFEL', P.A., professor, redaktor; GHEMAN, V.Ye.,  
redaktor; DOTSENKO, A.A., tekhnicheskiiy redaktor; MARTINA, M.P.,  
tekhnicheskiiy redaktor

[The hunter's handbook] Nastol'naia kniga okhotnika-sportsmena.  
Moskva, Gos. izd-vo "Fiskul'tura i sport. Vol. 2. 1956. 433 p.  
(Hunting) (MLRA 9:9)

BURDENKO, Anatoliy Alekseyevich; GERMAN, V.Ye., redaktor; IANINA, M.P.,  
tekhnicheskiiy redaktor

[Trapshooting] Strel'ba na kruglom stende. Moskva, Gos. izd-vo  
"Fizkul'tura i sport," 1956. 195 p. (MLRA 10:5)  
(Trapshooting)

PUPYSHEV, Petr Fedorovich; GERMAN, V.Ye., redaktor; MANINA, M.P., tekhnicheskiiy redaktor

[Hunting with bird dogs] Okhota s legavymi sobakami. Izd. 3-e, ispr. i dop. Moskva, Gos. izd-vo "Fizkul'tura i sport," 1957. 116 p. (Bibliotekhka nachinaushchego okhotnika, 17) (MLRA 10:8)  
(Bird dogs) (Fowling)

GERMAN, Vladimir Yavgen'evich, BAPMEL', S.V., redaktor; MANINA, M.P.,  
tekhnicheskii redaktor

[Hunting swamp and meadow birds] Okhota na bolotnuiu i lugovuiu  
dich. Izd. 2-oe, ispr. i dop. Moskva, Gos.izd-vo "Piscul'tura  
i sport," 1957. 103 p. (MLRA 10:10)  
(Game and game birds)

ARKHANGEL'SKIY, V.V., redaktor; GERMAN, V.Ye., redaktor; DEBRIN, I.I.,  
redaktor; PERMITIN, Ye.N., redaktor; SMIRNOV, N.P., redaktor;  
TUROV, S.S., redaktor; DOTSENKO, A.A., tekhnicheskiy redaktor

[ In the wilds; an almanac] Okhotnich'i prostory; al'manakh.  
Moskva, Gos. izd-vo "Fiskul'tura i sport." Vol.7. 1957. 332 p.  
(Hunting) (MLRA 10:8)



PANOV, Vladimir Akimovich; GERMAN, V.Ye., red.; SHEKTOROVA, Ye.I.,  
tekhn.red.

[With Czechoslovak and Rumanian hunters] V gostiakh u chesko-  
slovatskikh i rumynskikh okhotnikov. Moskva, Gos.izd-vo "Fiz-  
kul'tura i sport," 1960. 63 p. (MIRA 14:2)  
(Czechoslovakia--Hunting) (Rumania--Hunting)

ACC NR: AP6019433 (A) SOURCE CODE: UR/0135/66/000/006/0037/0038

AUTHOR: Maslov, V. A. (Engineer); German, V. T. (Engineer) <sup>54</sup><sub>B</sub>

ORG: none

TITLE: Corrosion resistance of welded joints in stainless steels in some aggressive media

SOURCE: Svarochnoye proizvodstvo, no. 6, 1966, 37-38

TOPIC TAGS: corrosion resistance, welding technology, stainless steel, *METAL JOINING*

ABSTRACT: The starting materials were stainless steels types Kh18N10T and Kh17N13M2T with a thickness of 6 mm. Sheets with dimensions of 400 x 100 x 6 mm were butt welded with type EA400/100 electrodes with a diameter of 4 mm. The opening between the edges was v-shaped with a truncation of 2 mm; the angle of the opening was  $60 \pm 5^\circ$ , and the gap 0.5-1.5 mm. A table shows the chemical composition and the mechanical properties of the basic metal and the welded joints. Samples were tested in a series of aggressive solutions. The results of these corrosion tests, at a temperature of 20-80°C, are also shown in a table. It can be concluded that steels Kh18N10T, and Kh17N13M2T and their welded joints have a high corrosion resistance in a number of

Card 1/2 UDC: 621.791.052:620.193:669.15-194

L 38482-66

ACC NR: AP6019433

industrially important media. The rate of corrosion of these steels does not exceed 0.0162 grams/m<sup>2</sup>-hour. However, the rate of corrosion of steel Kh1810T is approximately 5 to 10 times greater than that of steel Kh17N13M2T in media containing chlorine ions. Orig. art. has: none.

SUB CODE: 11/ SUBM DATE: none

Card 2/2

pb

GERMAN, E. A.

Glebov, S. V., and German, E. A. ATTEMPTS TO PRODUCE  
LIGHTWEIGHT REFRACTORY CONCRETE FOR SUSPENDED ROOF ROOF.  
Sbornik, 5 (2) 615-11(1937).- The basic materials of light-  
weight refractory concrete are refractory cement and lightweight  
grog.

GERMAN, S. A.

Glebov, S. V., and German, S. A. MONOLITHIC FLOORS OF TUNNEL-KILN CARBON REFRACTORY CONCRETE. *Stroitel'str., 6* (7) 1274-76 (1938).- Experiments showed that monolithic floors made from 60% crushed brick and 20% (by volume) of aluminous cement were satisfactory for cars used in tunnel kilns for firing brick and grog products.

GERMAN, Y. A.  
CA

PROCESSES AND PROPERTIES NOT

The production of ultralight-weight ware in plant conditions. B. A. Gerasimov. *Iskusstvo* 8, 205 (1940).  
The ware was intended as a substitute for vermiculite.  
A mixt. of carpenters' glue, resin and potash was used  
as a froth-former. The vol. wt. was 0.3-0.4; the crushing strength, 10-14 kg./sq. cm.; the insulating properties, good. B. E. Stefanovsky

ASB-55.6 METALLURGICAL LITERATURE CLASSIFICATION

GERMAN (1/1)

Defects of the auger press in working a lightweight body containing combustible material. B. A. GERMAN, *Zhurn. Khim. Prom.*, 1946, No. 11-12, pp. 574-75, abstracted in *Trans. Brit. Ceram. Soc.*, 41 (3) 63A (1942)—firing brick containing clay, grog, charcoal, and sawdust developed S-shaped cracks in drying. The defect was traced to the introduction of striation by the terminal blades of the auger (*Lenipress*). When the shaft was shortened so as to bring the blades clear of the inner end of the mouthpiece, the cracking ceased.

GERMANN, V.P.

C

**Ultralightweight brick.** M. N. GUSEV AND E. A. GERMAN. *Vopr. Gosizdat Inst. Nauch. Issledovaniy i Prikl. Khar. Otkrytiy. Prikl. Otkrytiy. Tekhn. Otkrytiy* 1945, pp. 77-82. Ultralightweight brick having a bulk density of 0.3 was obtained from a charge of Chasov Yar clay RV 35, Okhomya clay 30, Vladimirsk kaolin 19, and frothed grog dust 17%, with an emulsion consisting of 30 glue, 40 rosin, and 10% potash, and potassium alum as a stabilizer. The bulk density of the frothed mass was kept at 0.3 to 0.35. Green brick was dried for 5 days at not over 30° and fired at 1320° in a Hoffmann kiln. Bulk density was up to 0.29 and compressive strength was up to 8 kg/cm<sup>2</sup>, refractoriness 1750°, total shrinkage 25% (firing shrinkage 12%, initial deformation under 0.27 kg/cm<sup>2</sup> was at 1180°, loss of weight occurred after 4 thermal shock cycles (820° and air cool mg), and coefficient of heat conductivity at 200°, 400°, 600°, and 800° was 0.088, 0.131, 0.179, and 0.210 kg cal/m °C hr, respectively. D.Z.K.

ASB 11A METALLURGICAL LITERATURE CLASSIFICATION



GERMAN, E. A.

Frothed gray lightweight refractories. G. V. GILLET, K. L. GENZLER, AND E. A. GERMAN. Vsesoyuz. Nauchnoissledovatel. i Proekt. Inst. Khim. i Metal. Ind., Inst. Khim. i Metal. Ind., Moscow, 1945, pp. 83-113. Extensive data are given on the manufacture of frothed lightweight gray refractories. Best results were obtained with a mix composed of 70% ground frothed lightweight brick (Okhomska clay 15, Chasov-Yar clay 15, Vladivirsk kaolin 15, frothed lightweight brick dust 25%) and 30% binder (Chasov-Yar clay and 2% sulfite cellulose extract). Characteristics of this brick were as follows: complete shrinkage 0.6%, bulk density 0.96, compressive strength 31.5 k/cm.<sup>2</sup>, refractoriness 1410°C., and reheat shrinkage 0.51%. Further improvement is possible by raising the firing temperature to 1410° and using ground frothed lightweight brick fired at 1410°.

S.Z.K.

GERMAN, E. A.

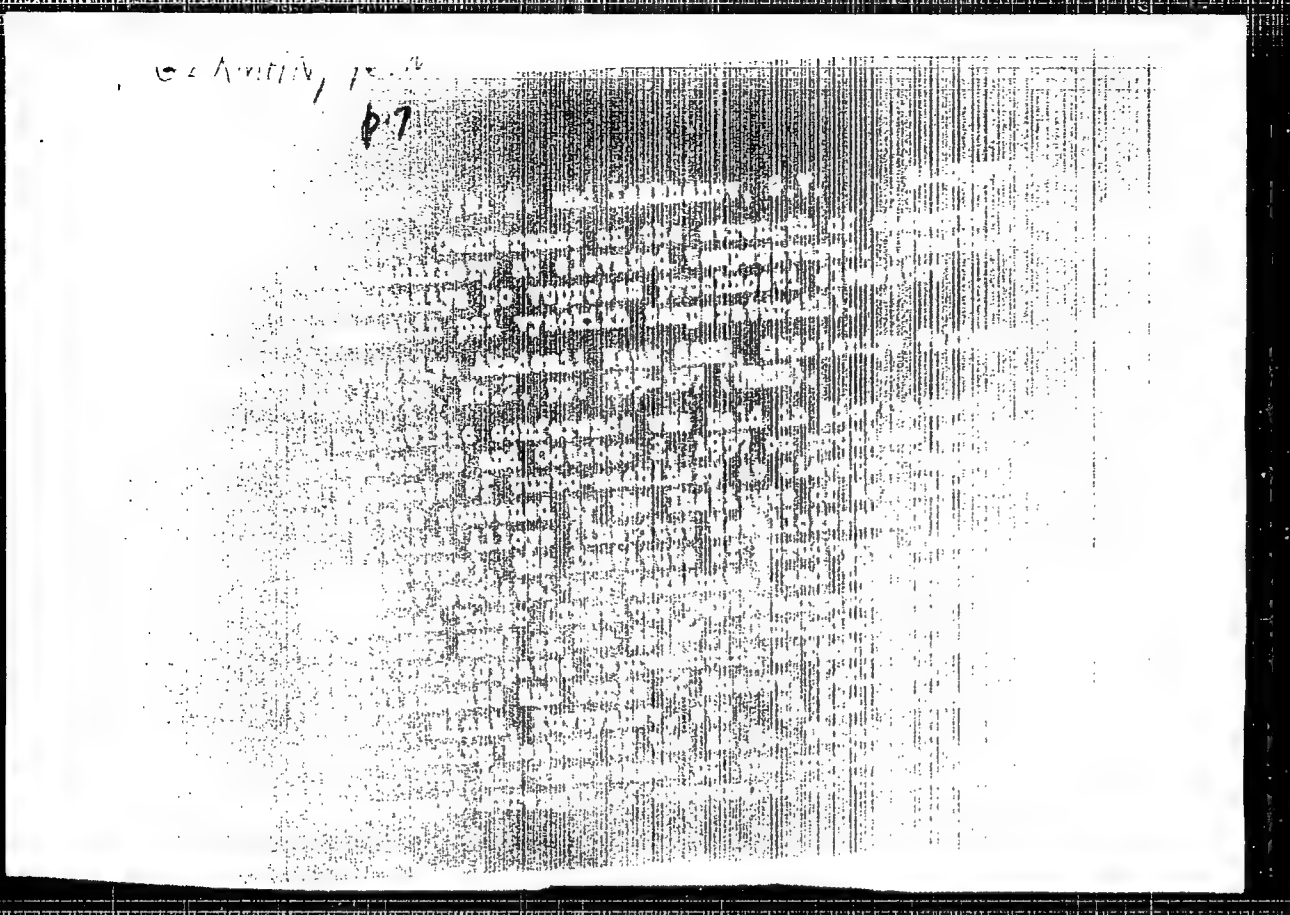
Manufacture of heat resistant lightweight refractories with a bulk density of 0.9 to 1.0 by using combustible admixtures. S. V. LEBOV, YA. A. GOL'DIN, E. A. GERMAN, AND V. A. SHCHETIN. Vsesoyuz. Gosudarst. Inst. Nauch.-Issledovatel. i Proekt. Rabot Ognestor. Prom., Inst. Ormenor, Lening. Omsenory, 1946, pt. 114-57.- Extensive data are given on laboratory and commercial scale manufacture of lightweight refractories with the aid of combustible admixtures. A flowchart is given. B.Z.K.

GERMAN, Ye.E., polkovnik meditsinskoy sluzhby, dotsent; ZARAKOVSKIY, G.M.,  
podpolkovnik meditsinskoy sluzhby, kand. med. nauk

Role of the ship physicians and fleet units in the solution of problems  
concerning the physiological aspects of the work of navy specialists.  
Voen.-med. zhur. no.10:60-62 '64. (MIRA 18:7)

GERMAN, Ye.E., dotsent, polkovnik meditsinskoy sluzhby;  
ZAKHAROVSKIY, G.M., kand. med. nauk, podpolkovnik med. sluzhby

Psychophysiological bases of increasing the work efficiency  
of navy specialists. Mor. sbor. 48 no.2:59-64. F '65.  
(MDA 18:11)



...the temperature fields they used the method of investigation of non-steady state heat conduction by means of high frequency heating, and the electro-thermal analogy by means of an electric circuit. They obtained a solution of the problem of the state thermal conductivity of a hollow cylinder of finite length with a relatively uniform temperature changes of the temperature and the heat transfer coefficients. The Institute, jointly with the Gas Turbine Construction Works, developed a method of cooling the discs by blowing cooling air through the



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24-2-20/28

24-2-27/28  
Scientific Conference on the strength of elements of  
machinery at elevated temperatures.  
materials. (The text is described)

GAVRILYUK, M.I., GERMAN, Ye.N.

Properties of cast tungsten. Issl. po zharopr. splav. 9:190-192  
'62. (MIRA 16:6)  
(Tungsten)

L 46057-66

ACC NR: AP6025939

SOURCE CODE: UR/0226/66/000/007/0062/0063

AUTHOR: German, Ye. N. (Moscow); Glebova, R. D. (Moscow)

ORG: None

TITLE: Destruction of cermet materials

SOURCE: Poroshkovaya metallurgiya, no. 7, 1966, 62-68

TOPIC TAGS: crack propagation, molybdenum, nickel, metal pressing, powder metal sintering, sintering furnace, *CERMET*

ABSTRACT: The authors present data on the initial development of cracks under a load. Crack propagation is studied on specimens made from molybdenum and nickel. The effect of molding pressure and sintering temperature on crack formation and propagation during bending tests is considered. The initial materials used were powdered nickel (GOST 9722-61) and powdered molybdenum (TTSVM-7-153-54).<sup>7</sup> These powders have the following grain dimensions: nickel 86% below 30  $\mu$ , molybdenum 97% below 5  $\mu$ . 10x2x80 mm rectangular specimens were produced by pressing with subsequent sintering. These were used for determining the effect of molding pressure and sintering temperature on strength. Pure nickel specimens were pressed at specific pressures of (2, 3, 4 and 5)  $\cdot 10^8$  N/m<sup>2</sup> and sintered in a hydrogen medium at 1273, 1373 and 1473°K for two hours. Molybdenum specimens were pressed at specific pressures of (2, 3, 4, 5 and 6)  $\cdot 10^8$  N/m<sup>2</sup> and sintered in a vacuum furnace at 2073, 2173 and 2273°K for two

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ACC NR: AP6025939

hours. Microcracks were studied on etched microsections. The specimens were loaded gradually and inspected for deformation. Photographs are given showing various kinds of crack formation and propagation. The test results show that cermet materials do not have identical failure characteristics. This is best demonstrated by sintered nickel and molybdenum. Like cast alloys they can be destroyed both along grain boundaries and within the grain itself depending on manufacturing technique and stress conditions. The basic reasons for premature failure of cast and deformed alloys are inclusions, segregations, microcracks, and sharp pore angles. Optimum procedure for producing sintered nickel and molybdenum results in strong grain boundaries. This in turn produces complex failure characteristics. Orig. art. has: 8 figures, 2 tables.

SUB CODE: 11/ SUBM DATE: 03Feb66/ ORIG REF: 002/ OTH REF: 003

Card 2/2 -rnt

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(NSA 28-8)

GERMAN, Ye.V.; KISLYAKOV, V.N.; REYNIN, I.V.

Geology and geomorphology of the Yamal Peninsula, a new region with prospects for finding oil and gas. Trudy VNIGRI no.225:311-329 '63.  
(MIRA 17:3)

LEN'KOV, V.I., doktor veterin. nauk, L'VKA, V.A., kandyd. vet. nauk,  
Yakovlev, Ye.I., mladshiy nauchnyy sotrudnik, Mikhalev, I., mladshiy  
nauchnyy sotrudnik, GERMAN, A.I., mladshiy nauchnyy sotrudnik

Enterotoxaemia of calves caused by *Electridia parvigena*.  
Veterinariia 41 no.1:16-18 1965. (MIRA 14:2)

1. Izvucheniye kazehekatsionnogo i enterotoksicheskogo detstva naya  
stanovitya.



GILLER, S.A., akademik; MEDNE, K.K.; VENTER, K.K.; GERMANE, S.K.;  
ZILE, A.Ya.

Tuberculostatic effect of certain derivatives of unsaturated  
aldehydes and ketones of the 5-nitrofuran series. Dokl. AN SSSR  
144 no.1:108-111 My '62. (MIRA 15:5)

1. Institut organicheskogo sinteza AN Latv SSR. 2. AN Latv SSR  
(for Giller).  
(Tuberculosis--Prevention) (Furan)

137-58-6-11496

Translation from: Referativnyy zhurnal, Metallurgiya, 1956, Nr 6, p 34 (USSR)

AUTHOR: German-Galkina, A.S.

TITLE: An Investigation of the Interactions in the  $\text{Na}_2\text{O}-\text{Al}_2\text{O}_3-\text{MgO}$  System at  $1200^\circ\text{C}$  (Issledovaniye vzaimodeystviy v sisteme  $\text{Na}_2\text{O}-\text{Al}_2\text{O}_3-\text{MgO}$  pri  $1200^\circ$ )

PERIODICAL: Tr. Vses. n.-i. alumin.-magn. in-ta, 1957, Nr 40, pp 25-31

ABSTRACT: An investigation is made of the interaction of the components of a mixture corresponding to the system  $\text{Na}_2\text{O}-\text{Al}_2\text{O}_3-\text{MgO}$  under isothermal conditions at  $1200^\circ\text{C}$ . Mixtures of various compositions [ having a ratio of Na and Al oxides corresponding to Na aluminate (I) or spinel ] were investigated. Roasting was for 2 hours, after which the roasted products were subjected to chemical analysis. In the course of the roasting at  $1200^\circ$  of mixtures corresponding to the  $\text{Na}_2\text{O}-\text{Al}_2\text{O}_3-\text{MgO}$  system having different amounts of  $\text{Na}_2\text{O}$ , the latter compound reacted with  $\text{Al}_2\text{O}_3$  in its entirety to form I. In mixtures with a stoichiometric amount of  $\text{Na}_2\text{O}$  for I, no spinel was formed, owing to the reaction of replacement of  $\text{MgO}$  by Na oxide from the spinel.

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137-58-o-11496

An investigation of the (cont.)

Spinel forms in small amounts at 1000°, whereas at a further increase in temperature to 1200° the MgO is displaced from the spinel by Na<sub>2</sub>O. No ternary compounds are found in mixtures of the compositions investigated.

N. P.

1. Aluminum oxide-magnesium oxide-sodium-oxide--Chemical reactions

Card 2/2

SOV. 81-59-8-28040

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 8, p 354 (USSR)

AUTHORS: Beneslavskiy, S.I., German-Galkina, A.S.

TITLE: The Development of a Technology for the Production of Alumina From Bauxites of the Bokson Layer

PERIODICAL: Tr. Vost. Sib. fil. AS USSR, 1958, Nr 12, pp 43 - 50

ABSTRACT: The characteristic of the composition of red varieties of Bokson bauxites and data on the technological testing of the samples of Bokson bauxites by the method of soda-limestone sintering are cited. The effect of the charge composition on the extraction of  $Al_2O_3$  and  $Na_2O$  and the effect of  $MgO$  on the sintering process have been studied under laboratory conditions. Semi-industrial tests have been carried out with an optimum charge of the following composition:  $Na_2O/Al_2O_3$  1.3:1,  $CaO/SiO_2$  2:1; conditioned limestones and those with a  $MgO$  content of 6%; sintering temperature 1,150 - 1,200°C; the sinters were leached out by solutions with a  $Na_2O$  concentration of 100 g/l and a caustic module of 1.5 in the final solution. The sintering was carried out in a rotating furnace with an output of 100 kg of charge per hour.

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SOV/81-59-8-28040

The Development of a Technology for the Production of Alumina From Bauxites of the Bokson Layer

The leaching of the finely ground ( $\sim 0.175$  mm) sinter was carried out by the agitation method (a higher extraction of  $Al_2O_3$ ), and of granulated sinter by the diffusion method. It has been shown that the processing of Bokson bauxites by the method of soda-limestone sintering makes it possible to attain a high extraction of  $Al_2O_3$  and  $Na_2O$ . ✓

N. Shirayeva

Card 2/2

BENESLAVSKIY, S.I.; GERMAN-GALKINA, A.S.

Developing an alumina production technology from Bokson deposit  
bauxites. Trudy Vost.-Sib.fil. AN SSSR no.12:43-50 (MIRA 11:11)

1. Vsesoyuznyy alyuminiyavo-magniyevyy institut.  
(Bokson Valley--Bauxites) (Alumina)

11.91

SOV/137-59-5-10085

18.3100

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 5, p 92 (USSR)

AUTHORS: Beneslavskiy, S.I., German-Galkina, A.S.

TITLE: Preparation of Alumina From Bauxites of the Tatarskiy Deposit

PERIODICAL: Tr. Vost-Sib. fil. AS USSR, 1958, Nr 12, pp 120 - 136

ABSTRACT: Bauxites from the Tatarskoye deposit have a rather variegated chemical composition. The content of basic components varies within the following limits (in %):  $\text{SiO}_2$  0.5-24,  $\text{Al}_2\text{O}_3$  27-62,  $\text{Fe}_2\text{O}_3$  5-53,  $\text{TiO}_2$  3.5-17. Laboratory investigations were carried out to determine conditions for processing such bauxites. Ground bauxite with grain dimensions passing through a 0.15 mm sieve, was leached by an alkali-aluminate solution of  $\text{Na}_2\text{O}_{\text{caust}}$  with a concentration as high as 200 g/l and a caustic modulus of 3.6 at 105°C. The authors investigated the causes affecting the rate of slime deposition. The technological process developed under laboratory conditions was tested at the experimental base of the Ural Aluminum Plant with respect to the following basic technological conversion processes: 1) drying of bauxite in a revolving

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SOV/137-59-5-10085

Preparation of Alumina From Bauxites of the Tatarskiy Deposit

furnace at  $280^{\circ}$  and  $450^{\circ}\text{C}$ ; 2) lixiviation in an autoclave with an alkali-aluminate solution of  $\text{Na}_2\text{O}$  with a concentration of 280 g/l and final  $\alpha$  caustic = 1.7, during 2 hours; 3) separation of the solution from the slime in a continuously operating thickener. Extraction of  $\text{Al}_2\text{O}_3$  under semi-industrial conditions was 89.7% (drying temperature -  $280^{\circ}\text{C}$ , lixiviation temperature -  $170^{\circ}\text{C}$ ). X

Card 2/2



GERMAN-GALKINA, A.S.; ZLOKAZOVA, F.M.; MEL'NIKOVA, V.P.; SIDORENKO, V.V.

Use of hydrocyclones in thickener units for the separation of  
solids in alumina-bearing sinters. TSvet. met. 34 no.1:52-54  
Ja 61.

(MIRA 17:3)

GERMAN-GALKINA, A.S.; ARAKELIAN, O.I.

Nature of the chemical losses of alumina in the processing of hydro-  
gillite bauxite slimes by the hydrochemical method. TSvet. zet. 36  
no.11:53-59 N '63. (MIRA 17:1)

3 L K M N - PROZOROVA, L I

~~GERMAN-PROZOROVA~~, Lyutsiya Pavlovna; VINOGRADOVA, Nina Ivanovna; KREYTSER, V.L., prof. doktor tekhn.nauk, red.; GOS, A.B., kand.tekhn.nauk, red.; KARPOV, V.G., kand.tekhn.nauk, red.; MALAKHOV, I.K., inzh., red.; LEVIT, A.B., inzh.red.; LEPESHINSKAYA, Ye.V., red.; BRUDNO, K.F., tekhn.red.

[English-Russian radiotechnical dictionary] Anglo-russkii radio-tekhnicheskii slovar'. Pod obshchey red. V.L.Kreitsera. Red. kollegiia: M.B.Gos i dr. Moskva, Gos.izd-vo tekhniko-teoret. lit-ry, 1957. 524 p. (MIRA 11:2)

(Radio-Dictionaries)

(English language--Dictionaries--Russian)

GERMAN-PROZOROVA, Lyutsiya Pavlovna; VINOGRADOVA, Nina Ivanovna; KREYTSER, V.L., prof., doktor tekhn.nauk, red.; GOS, M.E., kand.tekhn. nauk, red.; KARPOV, V.G., kand.tekhn.nauk, red.; LEVIT, A.B., inzh., red.; MALAKHOV, I.K., inzh., red.; LEPESHINSKAYA, Ye.V., red.; BRUDNO, K.F., tekhn.red.

[English-Russian radio engineering dictionary] Anglo-russkii radiotekhnicheskii slovar'. Pod obshchei red. V.L.Kreitsera. Red. kollegiia: M.E.Gos i dr. Moskva, Glav.red.inostr.nauchno-tekhn. slovari, 1960. 524 p. (MIRA 13:7)  
(Radio--Dictionaries)  
(English language--Dictionaries--Russian language)

GERMAN-PROZOROVA, Lyutsiya Pavlovna; YANKEL'SON, I.S.; KRSYTSHR, V.I.,  
prof., doktor tekhn.nauk, red.; GOS, M.E., kond.tekhn.nauk,  
red.; LEPESHINSKAYA, Ye.V., red.; KRYUCHKOVA, V.N., tekhn.red.

[English-Russian television dictionary] Anglo-russkii slovar'  
po televideniiu. Pod obshchei red. V.L.Kreitsers pri red.uchastii  
M.E.Gosa. Moskva, Glavnaia red.inostr.nauchno-tekhn.slovarei  
Fizmatgiz, 1960. 427 p. (MIRA 14:3)  
(Television--Dictionaries)  
(English language--Dictionaries--Russian language)

AID P - 4643

Subject : USSR/Aeronautics - radio

Card 1/1 Pub. 135 - 9/26

Author : German-Yevtushenko, I. A., Lt. Col.

Title : Audible reception of homing radio station calls

Periodical : Vest. vozd. flota, 5, 46-48, My 1956

Abstract : Description of the training of pilots in an aviation school in recognition of homing radio stations by audible reception of their call code letters. One sketch. The article is of no particular interest.

Institution : None

Submitted : No date

KOSTETSKIY, B. I., doktor tekhn. nauk, prof.,; GERMANCHUK, F. K., inzh.

Analyzing the use of friction materials in braking devices.  
Vest. mashinostr. 42 no.10:3-7 0 '62. (MIRA 15:10)

(Brakes)

GERMANE, S.; Belenkii, M.

On the action of acrichine (mepacrine) on the effect of hexenal (hexobarbitone) and morphine; contribution to the relation between chemical constitution and neuroplegic activity. In Russian. p. 153.

LATVIAS PSR ZINATNU AKADEMIJA. VESTIS. RIGA, LATVIA. No. 3, 1959

Monthly List of East European Accessions. (EEAI) LC, Vol. 9, no. 2, Feb. 1960 Uncl.



BELEN'KIY, M.L.; GERMANE, S.K.; AREN, A.K.; VANAG, G.Ya., akademik

A new class of pharmacologically active substances with a well-pronounced effect on the central nervous system. Dokl.AN SSSR 134 no.1:217-220 S '60. (MIRA 13:8)

1. Institut organicheskogo sinteza Akademii nauk LatvSSR.
2. Akademiya nauk LatvSSR (for Vanag).  
(INDANDIONE) (PHARMACOLOGY)

GERMANE, S.(Riga)

Materials on pharmacology of 2-amino-2-phenylindandione-1,3 derivatives. 1. Toxicity and narcotic activities of aminophenylindandione derivatives. (To be contd.) Vestis Latv ak no.10:129-134  
-60. (EEAI 10:9:10)

1. Akademiya nauk Latvyskoy SSR, Institut organicheskogo sinteza.

(Amino phenylindandione)

GERMANE, S. (Riga)

Materials on pharmacology of 2-amino-2-phenylindandione-1,3 derivatives.

Part 2. Antispasmodic activity of 2-amino-2-phenylindandions-1,3 derivatives. Vestis Latv ak no.11:127-132 '60. (EEAI 10:9)

1. Akademiya nauk Latvyskoy SSR, Institut organicheskogo sinteza.

(Amino phenylindandione) (Antispasmodic)

GERMANE, S.(Riga)

Materials on pharmacology of 2-amino-2-phenylindandione-1,3 derivatives.

3. Analgesic effect of 2-amino-2-phenylindandione-1,3 derivatives.

Vestis Latv ak no.12:153-158 '60.

(EEAI 10:9)

1. Akademiya nauk Latviyskoy SSR, Institut organicheskogo sinteza.

(Staphylococcus) (Nitrofurantoin) (Antibiotics)

GERMANE, S. (Riga)

Materials on pharmacology of 2-amino-2-phenylindandione-1,3 derivatives.  
4. On the pharmacology of 2-methylamino-2-phenylindandione-1,3 hydrochloride (V-39). 5. On the pharmacology of 2-ethylamino-2-phenylindandione-1,3 hydrochloride (V-31). Vestis Latv ak no.1:121-130 '61.  
(EBAI 10:9)

1. Akademiya nauk Latvyskoy SSR, Institut organicheskogo sinteza.

(Aminophenylindandione)	(Analgesics)	(Methyl group)
(Ethyl group)	(Hydrochlorides)	

GERMANE, S.

Pharmacology of 2-amino-2-phenyl-1,3-indandione derivatives. Report 4. Pharmacology of 2-methylamino-2-phenyl-1,3-indandione hydrochloride (V-39). Report 5. Pharmacology of 2-ethylamino-2-phenyl-1,3-indandione hydrochloride (V-31). Vestis Latv sk no.1:121-130 '61.

1. Institut organicheskogo sinteza AN Latvyskoy SSR.

GRINSHTEYN, V.Ya. [Grinsteins, V]; MEDNE, K.K.; ZAYEVA, S.P.; STOLYKO,  
N.S.; VEVERIS, A.P.; GERMANE, S.K.; ALBERTA, M.A.; GRIGALINOVICH,  
G.A.; TEMERE, V.A., ZELCHA, S.B. [Zelca, S.]

Tuberculostatic properties of mixed thiosemicarbazone guanyl-  
hydrazone 1,3-indandione, a representative of a new type of  
antitubercular substances. Dokl. AN SSSR 147 no.5:1083-1095  
D '62. (MIRA 16:2)

1. Institut organicheskogo sinteza i Institut eksperimental'noy  
i klinicheskoy meditsiny AN Latvriyskoy SSR. Predstavleno aka-  
demikom A.N. Nasmayanovym.

(TUBERCULOSIS) (ANTIBIOTICS) (KETONES)

ZAYEVA, S.P.; GILLER, S.A.; GEMAYE, S.K.; STRADYN', [Stradin, J.P.];  
ALEKSHYEVA, L.N.; KRUZNETSA, L.V.; AL'BERTE, M.A.; AYZPURIETE,  
I.F. [Aizpuriete, I.F.]; KALMBERG, R.Yu. [Kalnberg, R.J.]

Experimental study of furazolin (F-150), a new preparation of the  
nitrofurane series. Zhur.mikrobiol., epid. i imun. 32 no.10:  
17-20 0 '61. (MIRA 14:10)

1. Iz Instituta organicheskogo sinteza AN Latvyskoy SSR.  
(FURAN)



ACC NR: AP6031127

SOURCE CODE: UR/0197/66/000/008/0119/0126

AUTHOR: Germane, S. K.; Kimenis, A. A.; Popova, N. A.; Fridrikhson, E. Ya.

ORG: Institute of Organic Synthesis, AN LatSSR (Institut organicheskogo sinteza AN LatSSR)

TITLE: Toxicology of the new herbicide phenzaone (chlorazan) 1-phenyl-4-amino-5-chloropyridazine-6

SOURCE: AN LatSSR. Izvestiya, no. 8, 1966, 119-126

TOPIC TAGS: herbicide, toxicology, animal experiment, weed killer, pyridine, phenyl compound, mouse, rabbit

ABSTRACT: Results of a toxicological study of 1-phenyl-4-amino-5-chloro-pyridazine-6 showed that it possessed low toxicity for mice feeding upon it or receiving it interperitoneally. Field tests on rabbits showed that irritating amounts of the compound did not affect growth nor cause pathological changes in organs and tissues of rabbits. [WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: 10Mar66/ ORIG REF: 006/ OTH REF: 006/

Card 1/1

GERMANCHUK, F., inzhener (Kiyev); MORGUNOV, H., inzhener (Kiyev)

Some particularities of the flight operation of helicopters. Grazhd.  
av. 13 no.2:21-24 F '56. (ML3A 9:5)

(Helicopters)

14330

S/137/62/000/011/001/003  
B108/B186

93242  
AUTHOR:

G

Germanis, E.

TITLE:

Pulse generator with tunnel diode and transistor

PERIODICAL: Akademiya nauk Latvyskoy SSR. Izvestiya, no. 11 (184),  
1962, 21-28

TEXT: The chief advantages of a pulse generator with a tunnel diode and a transistor over a generator with only a tunnel diode are pointed out. In the former the tunnel diode is replaced by a two-terminal unit consisting of an emf, a tunnel diode, and a transistor (Fig. 7). The voltampere characteristic of such a two-terminal unit is shown in Fig. 4. Theoretically this characteristic is approximated as the sum of the linear approximations of the characteristics of the transistor diode junction and of the tunnel diode. The frequency of such a generator is higher than that of a tunnel diode generator and may reach a pulse repetition rate of several Mc. Moreover, its power can be kept higher. There are 7 figures. X

Card 1/2

Pulse generator with tunnel ...

5/197/62/000/011/001/003  
3108/3186

ASSOCIATION: Institut elektroniki i vychislitel'noy tekhniki AN Latv.SSR  
(Institute of Electronics and Computer Engineering AS LatvSR)

SUBMITTED: March 31, 1962

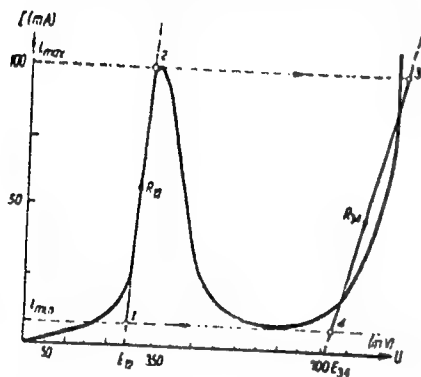


Fig. 4.  
Card 2/2

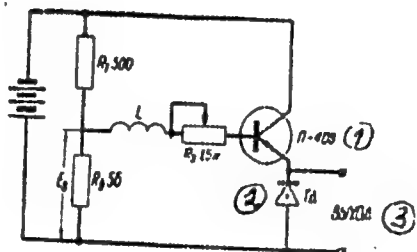


Fig. 7. Schematic diagram of a generator with tunnel diode and transistor. Legend: (1) n-405 (P-405) transistor, (2) tunnel diode, (3) output

GERMANI, V. E.

Search for ice on Caucasian rivers and possibilities for its progress.

Doc. TPI no. 53.3-36 '57.

(MLRA 10:2)

(Caucasus--Ice on rivers, lakes, etc.)

GENERAL, N. O. . . . .

GENERAL, N. O. . . . .  
N. O. . . . .  
(1911)

BELEVICH, V.V.; SHVETSOVA, V.F.; ZHITYAYKINA, N.F.; BYKADOROV, I.S.;  
IVANOV, G.I., kand.sel'skokhoz.nauk; GERMANISHEVILI, V.Sh.,  
kand.geogr.nauk, retsenzent; SOKOLOV, I.F., retsenzent;  
KALMYKOVA, V.V., retsenzent; LYUBOMUDROVA, S.V., retsenzent;  
KRUSHKOVA, T.S., retsenzent; BOYKOVA, K.G., retsenzent;  
NOVSKIY, V.A., otv.red.; VLASOVA, Yu.V., red.; SERGEYEV, A.N.,  
tekhn.red.

[Agroclimatic manual for the Maritime Territory] Agroklimaticheskii  
spravochnik po Primorskomu kraiu. Leningrad, Gidrometeor.izd-vo,  
1960. 129 p. (MIRA 14:4)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby. Primorskoye upravleniye. 2. Vladivostokskaya gidrometeorologicheskaya observatoriya (for Belevich, Shvetsova, Zhityaykina, Bykadorov). 3. Dal'nevostochnyy nauchno-issledovatel'skiy gidrometeorologicheskii institut (for Germanishvili, Sokolov, Kalmykova, Lyubomudrova, Krushkova, Boykova).  
(Maritime Territory--Crops and climate)

GERMANISHVILI, V.Sh.

Some characteristics of heat and ice conditions of the  
mountain rivers in Georgia. Trudy Tbil. NIGMI no.10:165-181  
'62. (MIRA 16:11)



GERMAN, A. I., Prof.

improvement of the training of graduate students for clinical specialization in the period Institutes of higher learning  
of the U.S.S.R. B.I. No. 10, Nov. 3, 1966, No. 7 100.  
1966, 1966

GERMANOV, A., agronom

From practice of the "Priamur's" Collective Farm. Sots.trud 4  
no.12:106-110 D '59. (MIRA 13:6)

1. Kokhoz "Priamur'ye" Tambovskogo rayona Amurskoy oblasti.  
(Amur Province--Agriculture--Income distribution)

MOSKALEV, Vladimir Iosifovich; GERMANOV, Aleksandr Aleksandrovich; SHA-  
TSILLO, O.I., red.; FOMICHEV, A.G., red. izd-va; BELOGUROVA, I.A.,  
tekhn. red.

[Description of systems using three-phase magnetic amplifiers for  
controlling the power supply of electric furnaces] Opisanie usta-  
novok s ispol'zovaniem trekhfaznykh magnitnykh usilitelei (TMU) dlia  
reguliruемого pitaniia elektricheskikh pechei. Leningrad, 1961.  
20 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen pe-  
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prompredpriatii, no.3) (MIRA 14:10)  
(Electric furnaces) (Magnetic amplifiers)  
(Electric power supply to apparatus)

UCHOMAYEVA, S.D.; GEL'COH, V.I. ; GERMANOV, A.D.

Increase in sensitivity to penicillin in resistant bacteria.  
Antibiotiki 6 no.12:1120-1123 D '61. (MLA 15:2)

1. Kafedra mikrobiologii (zav. - prof. M.N.Lebedeva) I Moskovskogo  
ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.  
(PENICILLIN)